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NSB KINGS BAY
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LETTER WITH GEORGIA DEPARTMENT OF NATURAL RESOURCES COMMENTS ON
WORK PLAN FOR CHEMICAL OXIDATION TREATMENT AT SITE 11 NSB KINGS BAY GA
7/27/2001
GEORGIA DEPARTMENT OF NATURAL RESOURCES

205 Butler Street, Suite 1154, Atlanta, Georgia 30334-4910

Lonice C. Barrett, Commissioner
Environmental Protection Division
Harold F. Reheis, Directorinch
425NSB Kings Bay Administrative Record
Document Index Number

MEMORANDUM

31547-000
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DATE: July 27, 2001

TO: Billy Hendricks *mb.*

THROUGH: Bruce Khaleghi *B*

FROM: Larry Papetti *Larry*

RE: Geologist's Review of "Work Plan No.
Site 11, Old Camden County Landfill, I
No. 00, received July 13, 2001), Kings

Ken -
Geologist's review
Comments

This memorandum contains my review of the referenced document (Work Plan) for chemical oxidation treatment (CHEMOX) and vegetable-oil injection at Naval Submarine Base (NSB) Site 11. I have expedited the review because Ken Yargus of NSB Environmental indicated that they would like to start work on August 6. The Work Plan contains the following deficiencies:

1. **Section 2.1.2, Appendix A:** The Work Plan proposes locations for the vegetable-oil injectors, but not the CHEMOX injectors. Section 2.1.2 states, "The chemical oxidation injector parameters (actual number, placement, and construction details)... are vendor-specific and will be determined by the selected chemical oxidation injection vendor at a later date." However, the CPM Project Schedule (Appendix A) does not provide for EPD review of the proposed injector parameters and placement once the vendor determines what they are. Ideally, EPD should have a chance to review the proposed injector parameters and placement before they are installed. However, adding an extra review step could delay corrective action activities by several weeks or months, possibly detracting from ultimate system performance. Therefore, EPD should allow NSB to proceed in the most expedient manner, but closely monitor system performance with respect to the designated criteria.
2. **Section 2.1.3:** The last paragraph of Section 2.1.3 states, "Vegetable oil injection will address the anticipated slight contaminant rebound following chemical oxidation injections and will preclude the further necessity of in-depth investigations at the site", but the Work Plan does not identify the performance criterion to use in evaluating this claim. In other words, does NSB expect the vegetable oil injection to completely eliminate the cVOC rebound or are cVOC concentrations expected to rebound, but below a certain threshold level? If the performance criterion is the baseline criterion in the CAP for monitored natural attenuation (maximum source-area cVOC concentration of 100 ppb), then the Work Plan should state that.

3. **Appendix D, Health and Safety Plan:** NSB should address the following deficiencies in the Health and Safety Plan (HASP):

- a. Section 3.3 and 3.4 of the HASP list the following biological hazards: snakes, poison ivy/oak/sumac, blood borne pathogens from waste, bees and other stinging insects and ticks. Section 3.4 is devoted specifically to tick bites and the danger of Rocky Mountain spotted fever and Lyme disease. However, the HASP does not mention the hazard posed by mosquitoes. Diseases including several types of encephalitis, such as that caused by the West Nile virus, are transmittable through mosquitoes and have been reported recently in Georgia. The HASP should therefore address the mosquito hazard.
- b. Section 3.7 of the HASP lists the contaminants of concern as 1,2-DCE, PCE, and TCE. However, vinyl chloride was present in some of the source-area characterization samples (See Table 1-3 of Work Plan). The HASP should therefore address vinyl chloride.